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October 20, 1998

VIA HAND DELIVERY

Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: Docket No. 98-93

Dear Ms. Salas:

Enclosed for filing with the Commission in connection with the above-referenced proceeding are an original and six copies of the "Comments of Northeastern University."

Should there be any questions regarding this matter, please communicate with this office.

Respectfully submitted,

William D. Wallace

Enclosures

cc: Dale Bickel
Peter Doyle

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
1998 Biennial Regulatory Review --	)	MM Docket No. 98-93
Streamlining of Radio Technical	)	
Rules in Parts 73 and 74 of	)	
The Commission's Rules	)	
	)	

COMMENTS OF NORTHEASTERN UNIVERSITY

Pursuant to Section 1.415 of the Commission's Rules, Northeastern University hereby submits its comments on the proposals regarding Class D noncommercial, educational FM stations in the "Notice of Proposed Rule Making" in the above-referenced docket.[1]

Northeastern's interest in this proceeding is the need to protect operation of its existing Class D noncommercial, educational FM station, WRBB, Boston. WRBB has been licensed to operate on Channel 285 (104.9 FM) since 1984. WRBB is true "educational" station managed by Northeastern students in consultation with a community advisory board and the university administration. This arrangement provides an opportunity for Northeastern students and community members to learn about and participate in radio station operations. (Some students

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[1] See Notice of Proposed Rule Making and Order, FCC 98-117 (released June 15, 1998) ("NPRM"). The time for filing comments was extended to October 20, 1998, by Order, DA 98-1468 (released July 23, 1998).

participate in the operation of the station in formal Communications Studies and Journalism courses, under faculty supervision, for which they receive academic credit.) WRBB also provides the Northeastern community with music, news and arts programming.

WRBB serves not only the Northeastern campus but also the Boston communities of Back Bay, Roxbury, Jamaica Plain, and Dorchester. These are areas with diverse populations, few of whom are served directly by the commercial FM stations in the market. WRBB, however, provides alternative music, news and public affairs programming directed toward these communities. In short, WRBB serves the public interest by providing a "voice" for and of Northeastern in the Boston metropolitan area and by providing service to otherwise underserved communities near its campus.

Background

WRBB operates as a Class D station on nonreserved FM Channel 285. Although Northeastern would welcome the opportunity to upgrade the facilities of WRBB, it has found in prior engineering studies that there is no available FM reserved or nonreserved band channel in the Boston area to which WRBB could migrate to upgrade its facilities. Northeastern recently had a study performed taking into consideration the proposals affecting Class D stations in the NPRM. This study revealed that the new rules, if adopted, would not have the effect of freeing up either a reserved or nonreserved FM band frequency in the Boston

market to which WRBB could migrate.[2] Therefore, unless there is significant expansion of or change in the Boston FM channel assignments, WRBB must continue to operate with its current parameters on Channel 285.

However, WRBB's continued operation on Channel 285 is threatened by the Commission's proposals in the NPRM. Currently, Section 73.509(b) of the Commission's Rules (47 C.F.R. § 73.509(b)) requires Class D stations to protect the 1 mV/m (60 dBu) contours of all other FM stations. The Commission has proposed to modify this standard (NPRM, ¶ 67) to require Class D stations to protect the predicted 0.5 mV/m (54 dBu) coverage contour for Class B stations and the predicted 0.7 mVm (57 dBu) contour for Class B1 stations.

Based on the current rule, WRBB avoids prohibited contour overlap with first-adjacent channel WWLI, Providence, a Class B station. WRBB's current 54 dBu F(50,10) coverage contour is nearly tangential to the WWLI 60 dBu F(50,50) coverage contour. However, because the WRBB transmitter is well within the predicted WWLI 54 dBu F(50,50), it would be impossible for WRBB to meet the more stringent requirement of the proposed new rule.[3]

Discussion

In the NPRM, the Commission asked whether Class D stations that could not comply with the new contour protection requirements "should be permitted to continue to operate at their present powers and antenna heights absent actual

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[2] See Engineering Statement of Robert W. Denny, Jr., P.E. (attached).
[3] See id.

interference complaints." Northeastern believes that existing Class D stations should be allowed to continue to operate with their current parameters. Therefore, if the Commission adopts the new contour protection rule, it should grandfather existing Class D operations.

In similar circumstances, the Commission has decided not to apply a new rule to existing stations and to preserve the status quo by grandfathering the operation of the potentially noncompliant station at the standard imposed by the superseded regulatory regime. For example, when the Commission adopted greater protection requirements for TV Channel 6 from reserved band FM stations, it grandfathered all existing noncommercial educational stations which would have been required to improve their facilities.[4] Similarly, when the Commission adopted a fixed geographic protected service area for the Multipoint Distribution Service ("MDS"), the Commission grandfathered all MDS and Instructional Television Fixed Service ("ITFS") licensed facilities and applications on file because the licensees and applicants had accommodated themselves to the existing protection standard.[5]

There are multiple public interest reasons for grandfathering existing Class D facilities, if the new protection requirements are adopted for Class B stations.

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[4] See Changes in the Rules Relating to Noncommercial, Educational FM Broadcast Stations, 57 RR 2d 107, 116-17 (1984).

[5] See Amendment of Parts 21, 74 and 94 of the Commission's Rules and Regulations with Regard to the Technical Requirements Applicable to the Multipoint Distribution Service, Instructional Television Fixed Service, and Private Operational-Fixed Microwave Service (OFS), 98 FCC 2d 68, 112-13 (1984).

First, while the Commission may be attempting to improve FM service by adopting more stringent protection requirements, it has also recognized that there is a public interest value in preserving existing service.[6] In this case, the impact of the proposed rule may be to eliminate the operation of an existing Class D station. Whatever benefits Class B stations would obtain from the modified protection standard do not outweigh the loss of an existing "voice" in the same market.

Second, requiring Class D stations to either go off the air or, if feasible, to reconfigure their power and antennas to comply with the new rule would cause an economic hardship for noncommercial entities like Northeastern. In prior decisions, the Commission used grandfathering to avoid imposing "unnecessary economic hardship" on existing stations that would have to come into compliance with new rules.[7] The public interest in promoting small Class D stations requires the same action in these circumstances.

Third, in adopting new regulations for the mass media, the Commission has considered the impact of its proposals on the public. Where the public has developed an expectation based on the existing rules, the Commission has

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[6] See Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands, 6 FCC Rcd 6792, 6794 (1991); see also Amendment of Parts 21, 74 and 94, 98 FCC 2d at 112-13 (noting that grandfathering was beneficial by helping to ensure service to certain areas).

[7] See Deregulation of Part 97 of the Commission's Rules Regarding Emissions in the Amateur Radio Service, 65 FCC 2d 137, 140-41 (1977); see also Amendment of Parts 21, 74, and 94, 98 FCC 2d at 119 (in reallocating ITFS spectrum to MDS, Commission grandfathered existing ITFS stations to "cause as little disruption as possible to existing ITFS operations").

grandfathered existing operations to minimize the impact on a service's audience.[8] Here, it is clear that WRBB has become an important source of broadcast programming for the Northeastern and adjacent communities. Grandfathering the contour protection requirements for Class D/Class B stations would similarly minimize the impact of the new rules on listeners by ensuring that the affected Class D stations can continue to operate with their existing parameters.

In addition to the change in protection contour standard, the Commission has asked whether it should adopt an actual interference standard for Class D stations, for example, as is currently applied to FM translators. See NPRM, ¶ 68. Northeastern opposes such a change in conjunction with the proposed change in protection contour requirements.

Northeastern recognizes that Class D FM stations operate on a secondary basis, and, therefore, are generally not permitted to cause interference into FM stations in other classes.[9] However, if the new contour protection requirements were adopted for Class D stations, then the "interference" that would be caused by a Class D station within the 60 dBu protected contour of a Class B station would result from a change in definition of what constitutes interference rather than actual complaints from listeners.

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[8] See Amendment of Part 76 of the Commission's Rules and Regulations Relative to Cable Television Systems and the Carriage of Sports Programs on Cable Television Systems, 54 FCC 2d 265, 281 (1975).

[9] See 47 C.F.R. § 73.512.

Under these circumstances, it would be unfair for the Commission to apply an actual interference standard because there may have been no complaint of interference. Moreover, it would be contrary to the public interest to apply the new definition because it would, as a practical matter, give Class B stations an opportunity to shut down a Class D station, thereby reducing the number of competitors and broadcast voices in the market. Accordingly, the Commission should reject the proposed rule.

Conclusion

For the foregoing reasons, Northeastern urges the Commission not to change the contour protection requirements in Section 73.509(b) affecting currently-authorized Class D stations. If the Commission does modify contour standard as proposed in the NPRM, Northeastern submits that there are substantial public interest reasons for applying the new rule prospectively only. Accordingly, all existing Class D stations should be grandfathered to the extent that their existing facilities do not comply with the modified contour protection requirements.

Respectfully submitted,

NORTHEASTERN UNIVERSITY

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Its Attorneys

Date: October 20, 1998

DENNY & ASSOCIATES, P.C.
CONSULTING ENGINEERS
WASHINGTON, D.C.

ENGINEERING EXHIBIT
IN SUPPORT OF THE COMMENTS OF
NORTHEASTERN UNIVERSITY
IN MASS MEDIA DOCKET NUMBER 98-93
1998 BIENNIAL REGULATORY REVIEW

ENGINEERING STATEMENT

INTRODUCTION

This Engineering Exhibit has been prepared on behalf of Northeastern University, licensee of noncommercial educational (NCE) FM station WRBB, Boston, Massachusetts, in support of its comments in Mass Media Docket Number 98-93, *1998 Biennial Review—Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules*, released June 15, 1998. WRBB is licensed to operate on channel 285D (104.9 megahertz) with effective radiated power of 0.019 kilowatt, circularly polarized, and antenna radiation center height above average terrain of 27 meters. The *Notice of Proposed Rule Making and Order* (*NPRM&O*) in this docket contains two areas of concern to Northeastern University with respect to the proposed revisions to the Class D rules: 1) the lack of any other reserved or nonreserved channel in the Boston area on which WRBB could

operate without causing or receiving interference, and 2) the impact of the revised contour protection requirements for Class B and B1 stations.

THE LACK OF RESERVED AND NONRESERVED CHANNELS IN THE BOSTON AREA

Northeastern University has conducted several allocation studies over the years in an ongoing effort to identify another channel on which WRBB could operate with increased facilities. These studies, made using the prohibited contour overlap provisions of Section 73.509 of the current rules, have failed to identify a channel other than channel 285, the licensed WRBB channel assignment, on which WRBB could operate without causing prohibited contour overlap with other stations in the area.

At Paragraph 56 of the *NPRM&O*, the FCC proposes to eliminate the inconsistency between the commercial and noncommercial FM prohibited contour overlap rules by decreasing the ratio of signal strengths defining prohibited contour overlap for stations operating on second adjacent channels by 20 dB. Under the present rules, the 80 dBμ F(50,10) contour of a proposed (undesired) station can not overlap the 60 dBμ F(50,50) contour of another (desired) station operating on a channel two channels removed from that of the proposed station, a D/U ratio of –20 dB. Under the proposed new rule,

the undesired signal strength would increase to 100 dBμ, a D/U ratio of -40 dB.

This proposed relaxation of the prohibited contour overlap rule for second adjacent channel stations has the potential to make channels available in a given area that were previously precluded from use under the more stringent rule. Unfortunately, stations operating in the Boston area are clustered tightly together, and no channel is precluded from use by WRBB strictly on the basis of second adjacent channel prohibited contour overlap. Therefore, the decrease in the D/U ratio for stations operating on second adjacent channels does not make another more suitable reserved or nonreserved channel available for use by WRBB in the Boston area.

INCREASED PROTECTION FOR CLASS B AND CLASS B1 STATIONS

Currently, Section 73.509(b) of the rules requires Class D stations to protect the 1 mV/m (60 dBμ) contours of all other FM stations regardless of their class. The FCC now proposes to revise the contour protection requirements for Class B and Class B1 stations and to require Class D stations to protect the 54 dBμ F(50,50) contour for Class B stations and the 57 dBμ F(50,50) contour for Class B1 stations. Implementation of this

proposal will create prohibited contour overlap between WRBB and the first adjacent channel Class B operation of WWLI(FM), Providence, Rhode Island.

Figure 1 of this exhibit shows the location of the WRBB 54 dBμ and 48 dBμ F(50,10) contours with respect to the WWLI 60 dBμ and 54 dBμ F(50,50) contours. As authorized, the WRBB 54 dBμ F(50,10) contour is nearly tangential to the WWLI 60 dBμ F(50,50) contour. The WWLI 54 dBμ F(50,50) contour encloses the WRBB site, so no change could be made to the WRBB transmitting facilities to eliminate the prohibited contour overlap that would result from the adoption of the proposed new rule. Since the distance that Northeastern University would have to move WRBB away from WWLI to eliminate prohibited contour overlap under the proposed new rule would be greater than the distance to the authorized WRBB 60 dBμ contour, WRBB could not relocate to a new site and continue to serve the population and area now served, allocation considerations notwithstanding.

Robert W. Denny, Jr., P.E.

DISTRICT OF COLUMBIA
ROBERT W. DENNY, JR.
No. 9214
REGISTERED
PROFESSIONAL ENGINEER

October 20, 1998

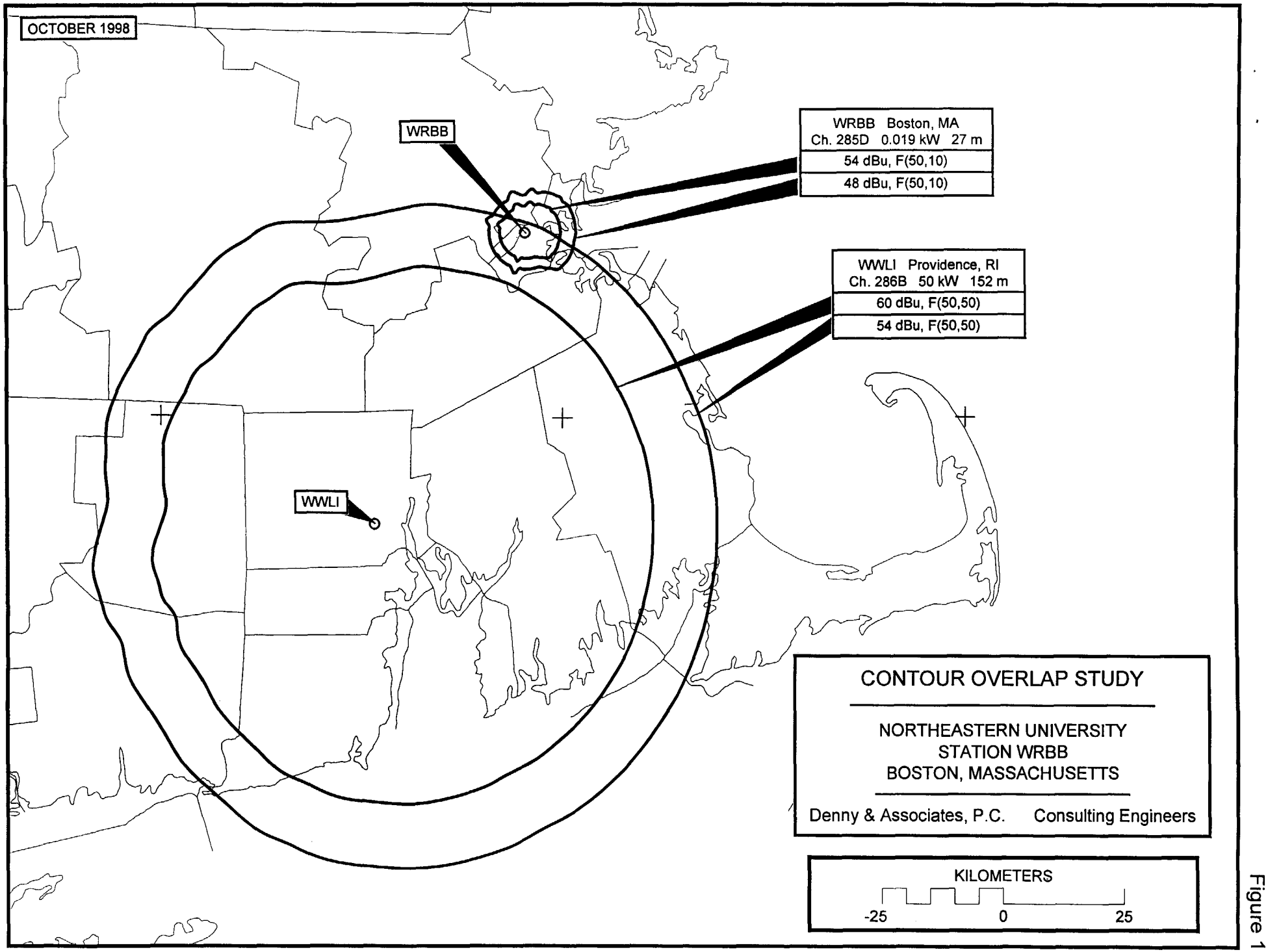
OCTOBER 1998
WRBB
WWLI
WRBB Boston, MA
Ch. 285D 0.019 kW 27 m
54 dBu, F(50,10)
48 dBu, F(50,10)
WWLI Providence, RI
Ch. 286B 50 kW 152 m
60 dBu, F(50,50)
54 dBu, F(50,50)
CONTOUR OVERLAP STUDY
NORTHEASTERN UNIVERSITY
STATION WRBB
BOSTON, MASSACHUSETTS
Denny & Associates, P.C. Consulting Engineers
KILOMETERS
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Figure 1